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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,005	09/09/2002	Vinod Nair Gopikuttan Nair	2000P17005US	3747
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HORIZON IP PTE LTD 166 Kallang Way 6th Floor SINGAPORE 349249, SINGAPORE				
			EXAMINER DALEY, CHRISTOPHER ANTHONY	
			ART UNIT 2111	PAPER NUMBER
DATE MAILED: 10/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,005	Applicant(s) NAIR ET AL.	
	Examiner Christopher A Daley	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 8 are pending.

Specification

Acronym "ISDN" need to spell out when they appear first time in the claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jirgal in view of Klingman (US6219736).
4. As to claim 1, Jirgal teaches of a data transfer unit for the transfers of data from one protocol (PCI) to another protocol (ABS). Jirgal does not explicitly teach ISDN, USB protocol. However Jirgal's system can be modified to utilize other protocols such as ISDN and USB, Col. 9, lines 50 – 51.

Jirgal teaches of a bus processor interface (151 of Figure 1) coupled to a processor bus (AMBA, 120), the processor interface buffer (152), and a PCI interface (155)

coupled to a PCI bus (130) and a PCI buffer (153). Jirgal teaches of the ASB protocol device (115) that is coupled to the processor bus as being an ARM processor, COL. 2, lines 35 – 39. This device controls to transfer of data between the busses, COL. 2,

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lines 29 – 32). Klingman teaches of a data transfer unit, figure 16 that interface an ISDN bus to a USB bus. It would have been obvious to one of ordinary skill in the art to combine the teaching of Jirgal and Klingman as this gives an embodiment to Jirgal to support different protocols such as ISDN and USB, COL. 9, lines 50 – 51).

5. As to claims 2 and 3, (Jirgal teaches that the buffer (153) is used to collect, store and forward transactions at the appropriate time, COL. 5, lines 8 – 14. It would have been obvious to one of ordinary skill in the art at the time of the invention to use to use register banks with the appropriate control, because the proper protocol reformatting is required, COL. 5, lines 14 - 16).

6. As to claim 4, (Jirgal teaches that the buffer is used to collect, store and forward at the appropriate time, COL. 5, lines 8 – 16. It would have been obvious to one of ordinary skill in the art to use the appropriate buffer such as a parallel /serial data converter because the proper protocol reformatting is required, COL. 5, lines 14 - 16).

7. As to claim 5, Jirgal discloses the interface unit of claim 1 wherein the processor bus interconnects a central processing unit, a memory unit and peripheral devices.

(Jirgal teaches that the processor is the ARM processor that contains a CPU, memory, and peripherals, COL. 2, lines 35 – 37).

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As to claim 6, Jirgal does not explicitly disclose the interface unit of claim 5 wherein the ISDN-based bus comprises an ISDN-oriented modular bus for coupling to voice, data and/or video devices. (However, Jirgal teaches that his invention provides sufficient flexibility to accommodate multiple standard busses and protocols, COL. 9, lines 46 – 49. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Jirgal and Klingman as this gives an ISDN embodiment to Jirgal.

8. As to claim 7, Jirgal does not explicitly teach the interface unit of claim 1 wherein said processor bus is connected to a high-speed data transfer unit. (However, Jirgal teaches that his invention provides sufficient flexibility to accommodate multiple standard busses and protocols, COL. 9, lines 46 – 49. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a high speed transfer unit because there is a need to take advantage of the speed advantages this unit brings while prolonging the existing ISDN device infrastructure, COL. 1, lines 50 – 57).

As to claim 8, Jirgal does not explicitly teach the interface unit of claim 7 wherein the high-speed data transfer unit is a Universal Serial Bus. (Jirgal teaches that his invention provides sufficient flexibility to accommodate multiple standard busses and protocols, COL. 9, lines 46 – 49. It would have been obvious to one of ordinary skill in the art at the time of the invention combine the teaching of Jirgal and Klingman as this gives a USB embodiment to Jirgal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A Daley whose telephone number is 703 605 4214. The examiner can normally be reached on 9 am. - 4p m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703 305 4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAD

CAD
October 6, 2004



TIM VO
PRIMARY EXAMINER